

Amendments To The Claims

The listing of claims presented below will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. (currently amended) A method for processing data ~~through a system for accessing and transmitting different data frames~~ in a digital transmission network, ~~wherein the system includes a user-network interface (UNI), which is used to connect to a user's network, a network-network interface (NNI), which is used to connect to the digital transmission network to transfer data, a mapping/demapping device, a virtual interface device, which couples with the UNI and couples with the NNI via the mapping/demapping device, and a data processing and dispatching device, which couples with the virtual interface device to control it to access and transmit the data frames, the method~~ comprising the following steps:

classifying the data frames by ~~the virtual~~ a virtual interface device;

finding at least one of a virtual private device, a virtual bridge device and a resilient packet ring device according to a data type number inserted in the classified data frames via a data processing and dispatching device;

transmitting, via the data processing and dispatching device, the classified data frames from the virtual interface device to ~~a processing device~~ the at least one of a virtual private device, a virtual bridge device and a resilient packet ring device for processing according to the data type number, wherein the data frames are

transmitted from the data processing and dispatching device to the at least one of the virtual private device, the virtual bridge device and the resilient packet ring device via an inter-device interface configured therebetween;

obtaining, by the virtual interface device, processed data frames via the data processing and dispatching ~~device and device~~;

finding a user-network interface (UNI) or a network-network interface (NNI) according to the data type number via a data processing and dispatching device and;

outputting the processed data frames to the UNI or NNI.

2. (cancelled)
3. (previously presented) A method according to claim 15, further comprising the step of processing the data frames by the virtual private device.
4. (previously presented) A method according to claim 3, wherein the step of processing the data frames by the virtual private device comprises the following step: relaying and/or converging and/or diverging the data frames.
5. (previously presented) A method according to claim 15, further comprising the step of processing the data frames by the Resilient Packet Ring device.

6. (previously presented) A method according to claim 5, wherein the step of processing the data frames by the Resilient Packet Ring device comprises the following step: terminating sending and/or relaying and/or beginning to send the data frames.
7. (previously presented) A method according to claim 3, further comprising the step of processing the data frames by the Resilient Packet Ring device.
8. (previously presented) A method according to claim 7, wherein the step of processing the data frames by the Resilient Packet Ring device comprises the following step: terminating sending and/or relaying and/or beginning to send the data frames.
9. (**currently amended**) A method according to claim 1 ~~claim 2~~, wherein further comprising the step of processing the data frames by the virtual private device.
10. (previously presented) A method according to claim 9, wherein the step of processing the data frames by the virtual private device comprises the following step: relaying and/or converging and/or diverging the data frames.
11. (**currently amended**) A method according to claim 1 ~~claim 2~~, wherein further comprising the step of processing the data frames by the Resilient Packet Ring device.

12. (previously presented) A method according to claim 11, wherein the step of processing the data frames by the Resilient Packet Ring device comprises the following step: terminating sending and/or relaying and/or beginning to send the data frames.
13. (previously presented) A method according to claim 9, wherein the step of the RPR device processing the data frames also comprises the following step: processing the data frames by the Resilient Packet Ring device.
14. (previously presented) A method according to claim 13, wherein the step of processing the data frames by the Resilient Packet Ring device comprises the following step: terminating sending and/or relaying and/or beginning to send the data frames.
15. (**currently amended**) A method according to **claim 1** ~~**claim 2**~~, further comprising the step of switching the data frames by the virtual bridge device.